11) Publication number:

0 049 953

A3

(12)

EUROPEAN PATENT APPLICATION

21) Application number: 81304188.6

22 Date of filing: 14.09.81

(5) Int. Cl.³: **C 07 C 39/17** C 07 C 39/42.

C 07 C 39/42, C 07 C 39/23 A 61 K 31/00, C 07 C 43/196 C 07 D 317/72, C 07 D 493/06 C 07 C 49/753, C 07 C 49/747 C 07 C 62/38, C 07 C 69/732 //C07D295/14, C07D317/00, C07D311/80

30 Priority: 19.09.80 US 189402

43 Date of publication of application: 21.04.82 Bulletin 82/16

88 Date of deferred publication of search report: 08.12.82

Designated Contracting States:
 AT BE CH DE FR GB IT LI LU NL SE

71 Applicant: PFIZER INC. 235 East 42nd Street New York, N.Y. 10017(US)

(72) Inventor: Johnson, Michael Ross 17 Eagle Ridge Drive Gales Ferry New London Connecticut(US)

Inventor: Melvin, Jr. Lawrence Sherman 7 Seabury Avenue Ledyard New London Connecticut(US)

(74) Representative: Wood, David John et al, Pfizer Limited Ramsgate Road Sandwich Kent CT13 9NJ(GB)

(54) 4-(Substituted phenyl)-naphthalen-2(1H)-ones and 2-ols, processes for their preparation, and pharmaceutical compositions containing them.

(57) Compounds having the formula

wherein A when taken individually is hydrogen; B when taken individually is hydroxy or alkanoyloxy having from one to five carbon atoms;

A and B when taken together are oxo;

 R_1 is hydrogen, benzyl or R_1^\prime wherein R_1^\prime is alkanoyl having from one to five carbon atoms, $P(0)(OH)_2$ and monoand disodium and potassium salts thereof, $-CO(CH_2)_2COOH$ and the sodium and potassium salts thereof, or $-CO(CH_2)_pNR_4R_5$ wherein p is 0 or an integer from 1 to 4, each of R_4 and R_5 when taken individually is hydrogen or alkyl having from one to four carbon atoms; R_4 and R_5 when taken together with the nitrogen to which they are attached

are piperidino, pyrrolo, pyrrolidino, morpholino or N-alkylpiperazino having from one to four carbon atoms in the alkyl group:

R₂ when taken individually is hydrogen;

R₃ when taken individually is hydrogen, methyl, hydroxy, hydroxymethyl, -OR₁' or -CH₂OR₁'; R₂ and R₃ when taken together are oxo, methylene or alkylenedioxy having from two to four carbon atoms;

W is hydrogen, pyridyl, or

-(-)-

wherein W₁ is hydrogen, chloro or fluoro;

when W is hydrogen, Z is

(a) alkylene having from five to thirteen carbon atoms;

(b) $-(alk_1)_m-O-(alk_2)_n-$ wherein each of $\{alk_1\}$ and $\{alk_2\}$ is alkylene having from one to thirteen carbon atoms; each of m and n is 0 or 1; with the provisos that the summation of carbon atoms in $\{alk_1\}$ plus $\{alk_2\}$ is not less than five or greater than thirteen; and at least one of m and n is 1;

when W is other than hydrogen, Z is

(a) alkylene having from three to eight carbon atoms;

or

(b) $-(alk_1)_m - O - (alk_2)_n -$ wherein each of (alk_1) and (alk_2) is alkylene having from one to eight carbon atoms; each of m and n is 0 or 1; with the provisos that the summation of carbon atoms in (alk_1) plus (alk_2) is not less than three or greater than eight; and at least one of m and n is 1;

or a pharmaceutically acceptable acid addition salt of those compounds wherein R_1 is $-\text{CO}(\text{CH}_2)_p N R_4 R_5$ and/or W is pyridyl; pharmaceutical compositions containing them, and processes for their preparation. The compounds are particularly useful in the treatment of nausea and as analgesics.



EUROPEAN SEARCH REPORT

Application number

EP 81 30 4188

	DOCUMENTS CONS	SIDERED TO BE	RELEVANT	· · · · · · · · · · · · · · · · · · ·	
Category		th indication, where appr vant passages	opriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ²)
DA	GB - A - 2 004 8 & BE - A - 870 4			1-14	C 07 C 39/17 39/42 39/23 A 61 K 31/00 C 07 C 43/196
DA	FR - A - 2 402 6 & EE - A - 870 4 & GB - A - 2 005	102		1-14	C 07 C 43/196 C 07 D 317/72 493/06 C 07 C 49/753 49/747 62/38 69/732 69/16
A	US - A - 2 886 5	589 (F.C. NO	VELLO)	1-14	69/145 69/18
A	GB - A - 464 328	HENKEL)		1-14	37/035 45/67 45/59 45/69
A	* Pages 3,4;			1-14	./.
					TECHNICAL FIELDS SEARCHED (Int. CI. 3)
•	The present search report has t	Deen drawn up for all clai	TTS.		C 07 C 39/17 39/42 39/23 A 61 K 31/045 C 07 C 43/196 69/18 69/16 69/145 69/732 49/00
	Place of search	Date of completio	n of the search		Examiner
The Hague 02-		02-09-1982	BONNEVALLE		
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document			T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document		



	CLA	IMS INCURRING FEES
The	present l	European patent application comprised at the time of filing more than ten claims.
ĺ	i	All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
		Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,
		namely claims:
ĺ		No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
X	LAC	CK OF UNITY OF INVENTION
ł	ntion and	Division considers that the present European patent application does not comply with the requirement of unity of direlates to several inventions or groups of inventions.
1	Cla and or	ims 1,2,4,5,6,7,8,9,10,12,13,14: compounds of formula I their application; when A is hydrogen and B is hydroxy alkanolyloxy and when R ₂ and R ₃ are not together oxo alkylenedioxy.
2)	Cla the	ims 1,2,3,5,6,7,11,12,13,14: Compounds of formula I and ir application; when A and B together are oxo or when and R ₃ together are oxo or alkylenedioxy independently
	of	the meaning of other symbols.
	×	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
		Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid,
		namely claims:
		None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.
		namely claims:



EUROPEAN SEARCH REPORT

EP 81 30 4188

DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)	
passages	Relevant to claim	
	•	
		C 07 F 9/12/
		C 07 F 9/12/, C 07 D 295/14 493/06
		317/00
		311/80
·		
		TECHNICAL FIFT DO
		TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
İ		
]	
	ł	
	l	
	Citation of document with indication when	Citation of document with indication, where appropriate, of relevant to claim